Shade With Evidence

Examine how an explanation connects evidence to a practical decision.

9.CL.9.b "Write explanations and expositions that incorporate evidence, using transitions and techniques that objectively introduce and develop topics."

NAME _____ DATE _____

1 READ AND MARK

Read it twice

YOUR JOB Underline the sentence that introduces the topic, circle two facts used as evidence, and number two transitions that develop or qualify the explanation.

What Street Trees Can Do

1 On a summer afternoon, two sidewalks on the same block can feel surprisingly different. One lies under tree branches; the other receives direct sunlight. Shade explains part of the difference: leaves block some sunlight before it heats pavement. Trees also release water vapor through their leaves in a process called transpiration. As that water evaporates, it draws heat from the surrounding air. These two effects do not make every shaded street equally cool. Building height, wind, and pavement materials also influence temperature. Still, street trees offer a practical way to reduce heat where people walk and wait for buses.

2 Evidence from measurements helps explain why shade matters. The U.S. Environmental Protection Agency reports that shaded surfaces can be 20 to 45°F cooler than the peak temperatures of unshaded materials. That comparison concerns surface temperatures, not a promise that the air above a sidewalk will cool by the same amount. For example, a shaded bench may absorb less solar energy than a bench exposed all afternoon. As a result, people may avoid contact with an extremely hot seat. The distinction between surface and air temperature keeps the evidence accurate rather than turning one measurement into a sweeping claim.

3 However, planting a tree is not an instant solution. A young tree provides less shade than a mature one, and trees need water and room for roots. Species selection matters as well because a tree suited to local conditions is more likely to survive. Therefore, a city planning a bus stop might consider where afternoon sun falls, how much planting space is available, and who will care for the tree. These details connect the evidence about cooling to a realistic decision. Street trees can help make public spaces more comfortable, but their effect depends on both location and long-term care.

2 ANSWER WITH EVIDENCE

Use the passage

1. How does the first paragraph introduce the topic without claiming that every shaded street is equally cool?

2. Which measurement supports the explanation about shade? How does the writer keep its meaning precise?

3. How does the transition “However” connect the third paragraph to the earlier explanation?

4. Why does the writer include a bus stop decision after describing what trees need?

3 YOUR TURN

Your own words

Write one paragraph advising where a town should plant its next shade tree: beside a sunny bus stop with planting space or beside an already shaded bus stop with little planting space. Introduce your choice objectively, use two distinct facts from the passage as evidence, explain their relevance, and include two transitions. Write 75 to 105 words.

ANSWER KEY

Shade With Evidence

GRADE 9 · 9.CL.9.b

PART 1 · READ AND MARK

Underline the sentence that introduces the topic, circle two facts used as evidence, and number two transitions that develop or qualify the explanation. Accept any marking that follows this job and points at the right text.

PART 2 · ANSWERS

#	QUESTION	ANSWER
1	How does the first paragraph introduce the topic without claiming that every shaded street is equally cool?	**It compares two sidewalks, then names other factors, including wind and pavement materials, that can affect temperature.**
2	Which measurement supports the explanation about shade? How does the writer keep its meaning precise?	**The EPA reports that shaded surfaces can be 20 to 45°F cooler than peak temperatures of unshaded materials. The writer specifies that this is a surface-temperature comparison, not an air-temperature claim.**
3	How does the transition "However" connect the third paragraph to the earlier explanation?	**It shifts from trees' cooling benefits to limits on planting, such as the time, water, and space trees need.**
4	Why does the writer include a bus stop decision after describing what trees need?	**The bus stop example shows how a city could use evidence about cooling along with practical needs, such as planting space and care.**

PART 3 · YOUR TURN (SAMPLE ANSWER)

A town deciding where to plant a shade tree should consider both heat and the space a tree needs to grow. The sunny bus stop with planting space is the stronger choice because branches can block sunlight before it heats pavement. In addition, the passage reports that shaded surfaces can be 20 to 45°F cooler than peak temperatures of unshaded materials; this evidence concerns surfaces, not air. However, a tree also needs water and room for roots. The available space makes this stop more likely to support a healthy tree over time.

For the marking job, accept an introductory sentence, two relevant factual statements, and transitions that show addition, contrast, result, or conclusion. For the paragraph, accept either location if the student supports the choice with two distinct passage facts, explains their relevance, and avoids overstating the temperature evidence.